

JASON Implementation Scenarios

Target Audience: Students in grades 4-9

(High schools and primary schools have also successfully used JASON with some adaptation.)

JASON can be successfully implemented in a variety of ways. The following are just a few of the many possible <u>Education Scenarios</u>:

I. Self-Contained Classroom

The self-contained classroom teacher can use JASON as a thematic unit that will encompass lessons in a variety of disciplines: science, technology, language arts, social studies, math, and art. The classroom can be literally transformed into an Expedition site (i.e. Channel Islands) as a result of a combination of science, geography, language arts, math, and art lessons on the makeup of the Channel Islands and its present and past inhabitants.. Stations around the room would allow students to explore JASON lessons in a variety of disciplines. During math time, the students could take measurements and graph results from JASON activities. The novel could be read aloud during story time or read during language arts time. A computer station in the room would allow students to explore various web sites, participate in chatsessions with researchers or on the novel, to journal, to enter class field study data, etc.

Teachers not wishing to implement an integrated, cross-curricular thematic unit may wish to use only the science, social studies, or language arts components of the curriculum in their classrooms.

II. Teaching Teams in the Elementary School

Schools that have several sections or classes of the same grade level within a self-contained setting may wish to make the most of their teachers' time and talents by having each teacher within the grade level become the 'specialist' for one particular subject discipline or unit of the curriculum. That is, if one teacher becomes very well versed in the technology components (or the science, math, social studies, or language arts components) and prepares all handouts and teaching materials for that section of the curriculum, s/he would then teach those lessons to all the students at that grade level. Or, the teacher 'specialist' could teach the information to his/her colleagues. By doing so, each classroom teacher then learns and teaches all components of the curriculum to their own students.

III. Nongraded/Montessori Schools

Nongraded classrooms really love JASON. The teacher uses a thematic approach. Students, no matter what their age or academic level, participate at the same time. Teachers implement the curriculum as part of math, social studies, language arts, technology, art, and science lessons. The needs of more advanced students or students of lesser ability are met through extensions and/or adaptations provided within the curriculum.

IV. Teaching Teams in a Middle School Setting

Schools using the middle school philosophy may have teacher teams from a variety of subject areas responsible for a group or block of students. Such settings often are looking for educational programs that use a thematic, cross-curricular approach. JASON is the answer to their search.

By using the table of Contents and the Multidisciplinary Integration Chart, teachers will immediately realize that although the curriculum has a heavy science component, ample opportunities exist for including other disciplines. The Social Studies/Geography teacher would find the materials from Stories (Units) 1 and 2 useful. The math teacher would find fourteen exercises listed on the Multidisciplinary Integration Chart which would provide opportunities for students to apply mathematics skills and reasoning to science or geography content. The art teacher and technology teacher would find exercises listed for their disciplines on the chart and in the Teacher Links section. The novels and the language arts suggestions listed on each investigation's Teacher Links page would appeal to the language arts teacher. The science teacher would find exercises suitable for many life, earth, or physical science topics. The teaching team would then use their planning time to decide when their students would "do" JASON. The live telepresence broadcast in January/February could be a high point (or the midpoint) in their JASON studies.

V. Elementary School Science or Geography Specialist Junior High Science or Geography Teacher Middle School Science or Geography Teacher

In this setting, the science (or geography) specialist/teacher "pilots" JASON. The teacher implements the science (or geography) lessons and then broadens out into the other disciplines while being careful not to tread on another teacher's turf. As the science (or geography teacher) uses JASON, the teacher continually keeps his/her colleagues whether they are teachers from the same department, teachers from other disciplines, and/or administrators informed of how much the students are enjoying JASON. At the end of the unit, the piloting teacher evaluates the unit and presents his/her information at department, team, and building meetings. While explaining the good results the teacher has had both from a student and from a teacher's own personal view point, the pilot teacher starts to talk about next year and ways to include other teachers and other students.

In other situations, the science (or geography) teacher may <u>be</u> the JASON teacher for his/her building. In that case the science (or geography) teacher implements the science (or geography) lessons and then broadens out into the other disciplines while being careful not to tread on another teacher's turf.

Lastly, the emphasis on live scientists and live research appeals to science educators. The role models these researchers provide often dispel the stereotypes of a "scientist". Cutting edge scientific research and technology often leads to great gains in knowledge not only for the student but also for the teacher. The inquiry-based nature of many of the science lessons is considered good science pedagogy.

VI. Technology Specialist

Technology teachers are often eager to find curriculum that allows them to use technology as a teaching/learning vehicle for students and teachers. JASON is the ideal curriculum for the technology specialist. Students will be able to use JASON computer components whether they occur in a computer lab setting or as a couple machines

located in the teacher's classroom. The curriculum is chock full of useful websites for students and teachers to explore. Team JASON Online will be a wonderful tool for teachers and students to use. In addition, the *TJO Guide* is full of many computer applications: chat sessions, message boards, interactive learning activities, databases, etc. Subject area teachers will find a great ally in the Technology Department of their school when they implement JASON. Conversely, technology specialist may wish to encourage subject area teachers to use the JASON curriculum because of its great technology linkages.

VII. Gifted and Talented Clusters

Teachers of gifted and talented clusters or classrooms will love JASON because of the variety of learning styles used in its lessons. The open-ended nature of many activities and the student exploration process appeals to the learning styles of gifted and talented youth who often enjoy exploring a topic to its very limits. The contact with live scientists is a plus.

VIII. Alternative Education Centers

Alternative Education Centers have found JASON to be a great teaching tool. The AEC often has students of a variety of ages and of learning abilities. Some students move in and out of the center for a variety of reasons. The thematic, cross-curricular approach of JASON is well suited for this setting. The abundance of hands-on, creative activities often meets the needs of students having short attention spans. The computer-based and multi-media activities provide tools for students to not only acquire knowledge but also to portray their understanding of concepts and processes.

IX. School-wide project

This is a wonderful way to use JASON. Since the theme of each year's JASON Expedition changes, administrators do not need to be concerned that information will be repeated as students progress from grade level to grade level. By immersing the whole school in the JASON Expedition's theme, a sense of community exists. Older students could be paired with younger students while studying JASON (i.e. older students being team leaders for aquatic field study day, older students reading the novel to younger students). In addition the hallways in the school could be transformed into a scene right out of one of the novels. Each grade level could be responsible for a particular island within the Channel Islands group, native group, or terrestrial or marine ecosystem. Student projects could then be displayed in the hallways. A schoolwide Channel Islands Night for parents/guardians could include skits, student constructions (tomols, bead money, kelp forest models), poster sessions, and storytelling by "elders". Students could act as "tour guides".

X. Grade Level's Special Program

Some schools have certain events designated for a particular grade level. Some examples of that would be trips to the State capitol, camping trips, and trips to museum/zoos. JASON could also be just such a special program. That is, a particular grade level could be the JASON year! It becomes a "right of passage" event. Teachers using this approach often make JASON a BIG EVENT in the lives of their students such that lower grades can hardly wait until they are old enough to "do" JASON.

XI. Nonpublic School

Nonpublic schools often have an easier time of implementing new programs as it often involves less "red tape" to implement new programs. JASON is a proven, quality program. The program offers a thematic approach that often appeals to nonpublic

teachers. Opportunities for cross-grade activities are also a plus. JASON provides nonpublic schools that may just be "getting into computers" an opportunity to implement classroom computer usage without a huge software expense. Lastly, JASON is comparatively less expensive to implement than many kit-based science programs.

XII. Home Schools

Home educators like the thematic, cross-curricular nature of JASON. They find that many different disciplines may be taught by using JASON curriculum. Many of the activities can be accomplished by using materials available at home or in neighborhood stores. The list of resources and websites is especially useful for home educators. If the home educator has several children, the curriculum can be the basis for instruction along several grade levels all at the same time. The extensions and adaptations suggested within the curriculum make this possible. The projects, hands-on explorations, computer applications, and different learning styles of the program are especially appealing to the home educator.

XIII. Afterschool or Saturday JASON Club

Several schools and/or institutions sponsor JASON Clubs outside of the regular school day. These programs take a variety of avenues. Some programs are extensions of the JASON instruction that occurs during the day. Other programs may be a student's first contact with JASON. Therefore, the structure of the two settings would differ. In one case, the instructor would be introducing the basic parts of JASON and then would extend outward from there into additional JASON components. In the other case, the instructor would build on the knowledge/experiences the students would have had during the school day. In both cases, the parents of students enrolled in these opportunities are often seeking additional learning experiences for their children.

XIV. Girl/Boy Scout, Girls/Boys Club, Campfire, "Y" Guide Troops, etc.

Some youth programs find JASON to be a way for children to earn badges or patches in science, geography, and technology areas. The badges/patches could be earned through independent work with JASON activities or through troop activities directed by an adult leader who is well versed in JASON materials.

XV: Vocational Technical Schools

Vocational Technical Schools are able to accentuate the integration of career development, academics, and technology of JASON. Often, these schools have mentor programs where VoTech students teach younger students. Since JASON is geared to four through ninth grade students, High School VoTech students may receive training then teach elementary students the JASON curricular and online exercises. JASON also offers VoTech students an opportunity to create a thematic "immersion exhibit" that utilizes the expertise of the students in carpentry, metal work, computer aided design, electronic and auto classes. These magnificent, electronic displays may be moved from one participating JASON school to another, or showcased at a local community center. Vocational Technical Schools may also partner with a local JASON PIN Site, to create an interactive or stage display that can be used during the live expedition broadcast.